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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/617,861	07/14/2003		Richard T. Takeuchi	03-007	3806	
7590 03/24/2005		03/24/2005		EXAMINER		
Eugene Byrd				KRECK, JOHN J		
PO Box 2607 Fairfax, VA 22031			ART UNIT	PAPER NUMBER		
				3673		
				DATE MAIL ED. 02/24/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.	Applicant(s)	
10/617,861	TAKEUCHI ET AL.	\sim
Examiner	Art Unit	
John Kreck	3673	•

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-13 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-13 is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
O) Claim(5) are subject to restriction and/or stocked requirement.						
Application Papers						
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Paper No(s)/Mail Date						
S. Patent and Trademark Office						

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claims 1 and 11 call for a "redox plant"; however the specification fails to describe how to make or use a "redox plant".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1 and 11 call for "a redox plant". Since applicant has not defined or described the "redox plant" in the specification; one of ordinary skill in the art would not be able to ascertain the scope of the claim; thus the claims fail to particularly point out and distinctly claim the invention. Note that the only claimed use for the redox plant is storage (claim 4): is the redox plant a storage tank?

Claim 6 is unclear regarding "obtaining a solid specimen of said treated slurry".

Slurry is not generally considered to be solid—does this claim require an entirely solid sample?

3. Claim 1 purports to define a "process for subterranean waste disposal and processing" and calls for the providing of a system, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Note that claim 2 calls for a specific process step: "mechanically pulverizing..."; and thus claim 2, and the claims which depend from claim 2 are not rejected under these grounds.

Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brassow, et al. (U.S. Patent number 4,906,135).

Brassow teaches providing a sealed empty subterranean chamber; providing a waste receiving and processing system including a series of buildings and plants; the system including a waste receiving a processing plant ("receiving building"); pumping plant; a redox plant (see 35 and 40: the acid and caustic storage tanks are believed to anticipate "redox plant"); and an equipment housing building as called for in claim 1. Alternatively, if it is deemed that the redox plant is not anticipated by Brassow; then it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the Brassow process with a redox plant, in order to process waste.

Regarding independent claim 11:

Brassow shows the chamber; and waste processing system including receiving a processing plant; pumping plant; redox plant; and housing building as called for in claim 11. Alternatively, if it is deemed that the redox plant is not anticipated by Brassow; then

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it would have been obvious to one of ordinary skill in the art at the time of the invention to have modufued the Brassow system to have a redox plant, in order to process waste.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brassow in view of Schmidt, et al. (U.S. Patent number 5,387,737).

Brassow teaches the receiving and treating, but fails to explicitly teach the mechanically pulverizing.

Schmidt teaches the mechanically pulverizing; in order to make the slurry easier to pump into the well. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Brassow process to have included mechanically pulverizing as called for in claim 2.

Brassow teaches the providing a conduit as called for in claim 3.

Brassow teaches the delivering excess slurry to the plant for storage: storage in a particular plant (e.g. redox plant) would have been obvious, based on design considerations.

6. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brassow and Schmidt as applied to claim 4 above, and further in view of Berezoutsky (U.S. Patent number 4,417,829); Butler (U.S. Patent number 4,474,053); and Cummings (U.S. Patent number 5,413,432).

Brassow fails to teach the ventilation conduit; collection conduit; pipe; and displaceable conduit. Brassow fails to teach the gas burning system.

Official Notice is taken of the fact that it is well known to provide buildings with ventilation conduits; in order to provide fresh air. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow process to have a ventilation conduit, in order to provide fresh air to the building.

Berezoutsky teaches a specimen collecting conduit and displaceable extraction conduit, in order to collect samples form underground.

Butler teaches the desirability of sampling and monitoring underground disposal sites.

Cummings teaches a system for generating electricity from gas.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow process to have included the conduits, pipe and displaceable conduit; in order to collect samples and monitor the disposal space.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow process to have included a gas burning system for generating electricity as called for in claim 5, in order to provide power.

Berezoutsky teaches obtaining a specimen as called for in claim 6.

Berezoutsky teaches electronic monitoring as called for in claim 7.

Berezoutsky teaches vertically displacing as called for in claim 8.

With regards to claim 9 the "spent oil well" is a product-by process limitation; which is deemed to be anticipated by the salt dome taught by Brassow.

Cummings teaches burning methane as called for in claim 10.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brassow in view of Berezoutsky (U.S. Patent number 4,417,829); Butler (U.S. Patent number 4,474,053); and Cummings (U.S. Patent number 5,413,432).

Brassow fails to teach the ventilation conduit; collection conduit; pipe; and displaceable conduit. Brassow fails to teach the gas burning system.

Official Notice is taken of the fact that it is well known to provide buildings with ventilation conduits; in order to provide fresh air. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow system to have a ventilation conduit, in order to provide fresh air to the building.

Berezoutsky teaches a specimen collecting conduit and displaceable extraction conduit, in order to collect samples form underground.

Butler teaches the desirability of sampling and monitoring underground disposal sites.

Cummings teaches a system for generating electricity from gas.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow system to have included the conduits, pipe and displaceable conduit; in order to collect samples and monitor the disposal space.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Brassow system to have included a gas burning system for generating electricity as called for in claim 12, in order to provide power.

With regards to claim 13 the "spent oil well" is a product-by process limitation; which is deemed to be anticipated by the salt dome taught by Brassow.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jackson (U.S. Patent number 5,109,933); Eggert, et al. (U.S. Patent number 5,000,617); Pearson, et al. (U.S. Patent number 5,433,553); and Billue (U.S. Patent number 3,236,053) teach similar systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is (703)308-2725. The examiner can normally be reached on M-F 5:30 am - 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703)308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). JOHN KHECK PRIMARY EXAMINE

John Kreck Examiner

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20 March 2005